



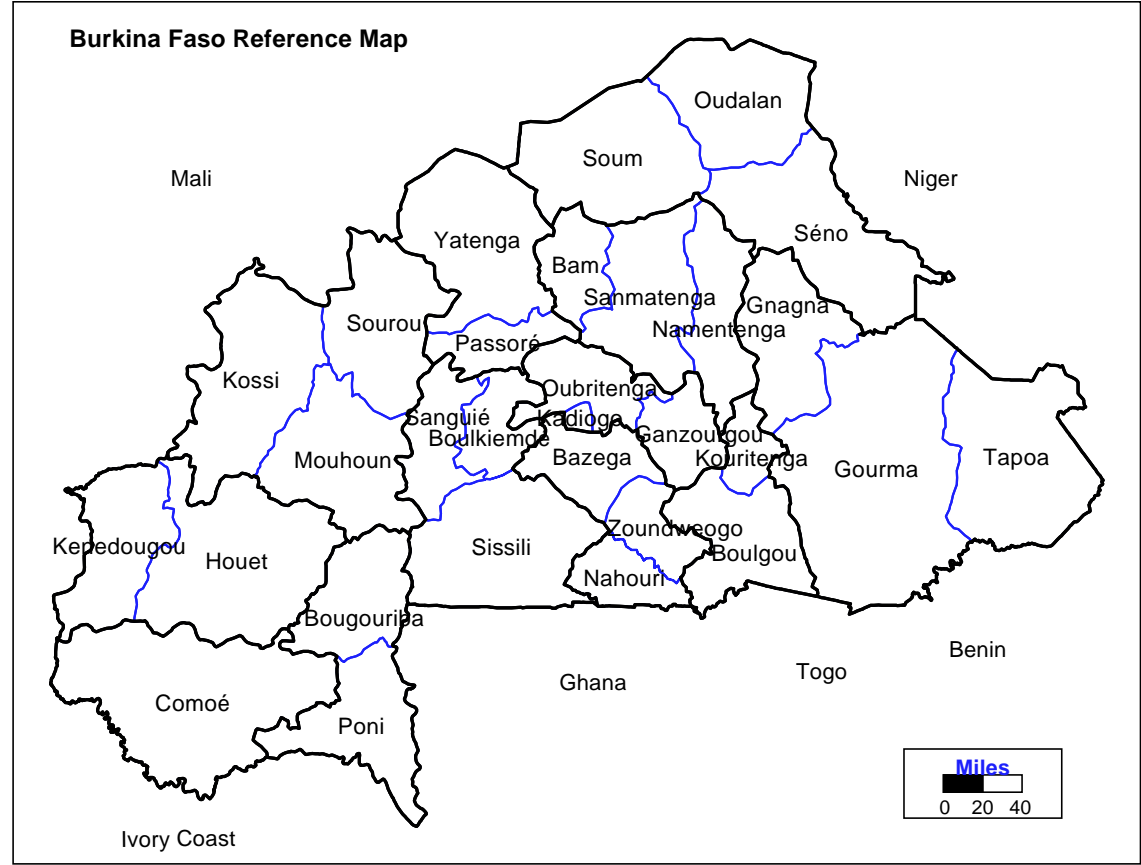
**Burkina Faso 1997/98
Current Vulnerability Assessment
February 1998**

**Famine Early Warning System Project
U.S. Agency for International Development**

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Figure 1. Burkina Faso Reference Map

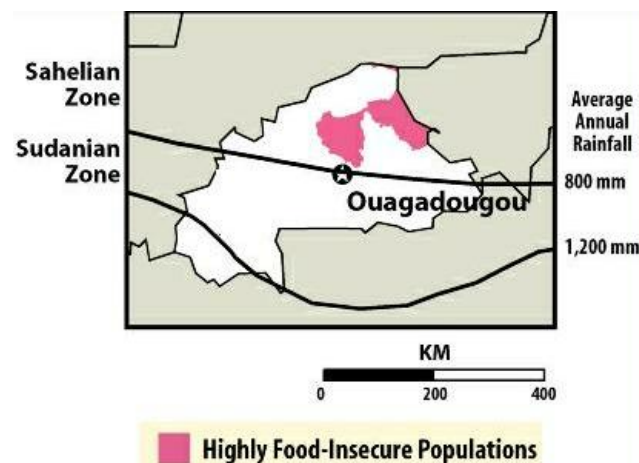


Source: FEWS

SUMMARY

Poor harvests in the northern Sahel and Central Plateau areas of Burkina Faso have left populations in these areas food insecure in 1998. Rainfall in 1997 was below average and poorly distributed in the Central Plateau and northern Sahel Provinces of Burkina Faso, which led to reduced cereal crop production in those areas. In contrast, the southern and southwestern Provinces received relatively good rainfall throughout the season, and harvests were good. The preliminary Ministry of Agriculture- Permanent Inter-State Committee for Drought Control in the Sahel (CILSS)-FAO estimate for net 1997/98 cereal production in Burkina Faso for all cereals combined is 1,903,629 MT, down 8 percent from the previous year and 7 percent from the 1992/93–1996/97 average. Mid-1998 cereal consumption needs are estimated at 2,059,580 MT, leaving a production deficit of almost 156,000 MT. This is an unusually large deficit for Burkina Faso, compared with an average surplus of approximately 100,000 MT. The production deficit will be met by net stocks and projected imports. An excellent cereal harvest in Mali, resulting in large cross-border cereal flows, is helping to mitigate the production shortfall, especially in the northern Provinces that border the important cereal surplus Séno Plain of Mali.

Figure 2. Highly Food-Insecure Populations in Burkina Faso in 1997/98



Source: FEWS

Analysis of provincial cereal production shows that a majority of the country's 30 Provinces experienced worse-than-average harvests. While on average 10 Provinces out of 30 fail to produce at least 190 kg per capita, this year 18 did not reach that level. Cereal production was more than 25 percent below average in 14 Provinces, and in 5 of those Provinces production was more than 50 percent below average.

In Bam, Sanmatenga, and Séno Provinces, production will meet less than 66, 35, and 36 percent of needs, respectively, compared with meeting over

85 percent on average. Coming on the heels of a poor harvest last year, reduced production this year has left approximately 256,000 persons in these 3 Provinces highly food insecure (figure 2) and another 392,000 persons in 13 Provinces moderately food insecure.

I. INTRODUCTION

This current vulnerability assessment (CVA) presents an analysis of the impact of recent events on populations' current food security status. Food security is a measure of whether an individual, household, community, or any population group has access to sufficient safe and nutritious foods that meet dietary needs and food preferences for an active life. There are two important aspects of food security: food availability and food access:

1. **Food availability** is defined as the amount of food that is, and that will be, physically present in the country during the current consumption year.¹
2. **Food access** is a household's ability to acquire that "available" food, through its own (on farm) production and stocks, market transactions (cash or in kind), or transfers (private or government) for the current consumption year.

This report is organized to address first food availability and then food access. Section II presents an analysis of food availability at the national and subnational levels. At the national level, the focus is on evaluating current

This CVA categorizes populations as food secure or food insecure. **Food-secure** populations can meet their food needs in the current year without altering normal income activities or depleting savings. For the purpose of response planning, food-insecure populations are distinguished according to their degree of food insecurity:

- **Extremely food-insecure** populations have depleted their asset base to such a degree that without immediate outside assistance, they will face famine. Appropriate interventions include emergency food distributions and long-term rehabilitation programs.
- **Highly food-insecure** populations cannot meet their food needs during the current year without reducing consumption or drawing down assets to such a degree that they compromise their future food security. Appropriate interventions include nutritional support for vulnerable groups, food for work, income and asset support, and market interventions.
- **Moderately food-insecure** populations can meet their food needs in the current year, but only by drawing down savings or relying heavily on secondary income activities. Should market access or income from secondary activities be compromised, these populations might become highly food insecure in the current year. No interventions are necessary, but positioning of cereals would facilitate market interventions if conditions deteriorate.

levels of production, stocks, and net imports, comparing them with average levels, and calculating the national food balance. This is the first step in understanding whether there will be enough food available to meet the consumption needs of the entire population in the current year. This is followed by an evaluation of changes in production at the subnational level and the possible implications these changes will have on food flows and local availability.

Section III presents an analysis of food access at the socioeconomic group level, going beyond the issue of food availability to a determination of how the current harvest and other factors have affected the various socioeconomic groups' abilities to acquire sufficient food to meet their current food needs.

FEWS considers the following factors in making this determination:

- Harvest outcomes over the past three seasons
- Degree of dependence of each group on agricultural production for meeting food needs
- Levels and diversity of other income sources
- Market availability and prices of cereals²
- Coping strategies

Section IV summarizes the actions that are being taken or need to be taken to respond to any food emergencies.

II. FOOD AVAILABILITY

A. National Food Availability

1. Production

Poor growing conditions affected much of the Central Plateau, northern, and Sahelian Provinces during the 1997/98 growing season.³ Although the rains began early across much of this zone, there were long dry periods in August and September that prevented millet and sorghum plants from completing their growth cycle. In contrast, Provinces in the south and southwest—the main granary of the country—received relatively good rainfall throughout the season, and harvests were good.

Gross national cereal production for 1997/98 was 2,274,400 MT—8 percent below both the previous year and average⁴ (Table 1). In absolute terms this represents 207,400 MT and 188,700 MT less cereals produced this year compared with last year and with average, respectively. Millet, sorghum, and fonio production fell by 9, 14, and 10 percent, respectively, compared with average. In contrast, maize and rice production increased 13 and 38 percent, respectively.

2. Stocks⁵

Initial cereal stocks are estimated at 102,283 MT: 81,075 MT of traditional cereals,⁶ 3,297 MT of wheat, and 17,911 MT of rice. Closing stocks are estimated at 58,702 MT of all cereals.

3. Imports/Exports

Table 1. Comparison of 1997/98 Provisional Gross Production Estimates With Final Estimates for 1996/97 and Average

Season	Cereal					
	Millet	Sorghum	Maize	Rice	Fonio	Total
1997/98 (MT)	736,800	1,094,500	331,900	98,600	12,600	2,274,400
1996/97 (MT)	811,500	1,254,000	293,700	111,800	10,800	2,481,800
Average (MT)	811,900	1,271,000	293,400	71,400	14,000	2,461,700
Difference in % 1997/98 vs 1996/97	–9%	–13%	+13%	–12%	+17%	–8%
Difference in % 1997/98 vs Average	–9%	–14%	+13%	+38%	–10%	–8%

Source: Ministry of Agriculture, FAO/CILSS

Official cereal imports are essentially limited to rice and wheat, which generally serve to meet the consumption needs of urban populations. Projected imports for the 1997/98 marketing year are estimated at 101,913 MT of commercial food and 25,554 MT of food aid, for a total of 127,467 MT. Flows of traditional cereals between Burkina Faso and its neighbors are rarely documented in official statistics and are therefore not included in the national cereal balance below. However, these flows can be significant, depending on the harvest outcome in Burkina and neighboring countries. Last year, there were important inflows and outflows of cereals to and from Mali and also significant outflows toward Niger. This year cereal production in Tillabéry Department in western Niger is 22 percent below average, and this is likely to exacerbate cereal shortfalls in northeastern Burkina Faso. In contrast, Mali has very good production this year, and traders are importing Malian maize for the Ouagadougou market.

4. Cereal Balance

Net national production is 1,903,629 MT, while estimated mid-1998 cereal consumption needs are 2,059,580 MT, leaving a production deficit of almost 156,000 MT. When projected rice and wheat imports and net stocks are added, there is a net national surplus of around 15,000 MT.

Table 2. Preliminary Cereal Balance for 1997/98¹

	Rice	Wheat	Traditional Cereals	Total
Population through 4/30/1998				10,839,895
Availability	72,150	3,297	1,930,464	2,005,912
Production				
Gross production	98,617	—	2,175,752	2,274,369
Net production¹	54,239	—	1,849,389	1,903,629
Initial stocks as of 11/1/97	17,911	3,297	81,075	102,283
Farmer	—	—	56,897	56,897
Other	17,911	3,297	24,178	45,386
Needs	225,329	55,652	1,837,101	2,118,282
Human consumption¹	205,958	52,031	1,801,591	2,059,580
Final stocks	19,371	3,821	35,510	58,702
Farmer	—	—	—	—
Other	19,371	3,821	35,510	58,702
III. Gross Surplus (+) or Deficit (-)	-153, 179	-52,555	+93,364	-112,371
IV. Imports/Exports	61,030	66,437	0	127,467
Projected Commercial Imports	55,000	46,913	0	101,913
Projected food aid	6,030	19,524	0	25,554
Projected exports	0	0	0	0
V. Net Surplus (+) or Deficit (-)	92,149	13,882	+93,364	+15,097
VI. Per Capita Cereal Availability¹ (kg)	12.3	6.4	178.1	196.8

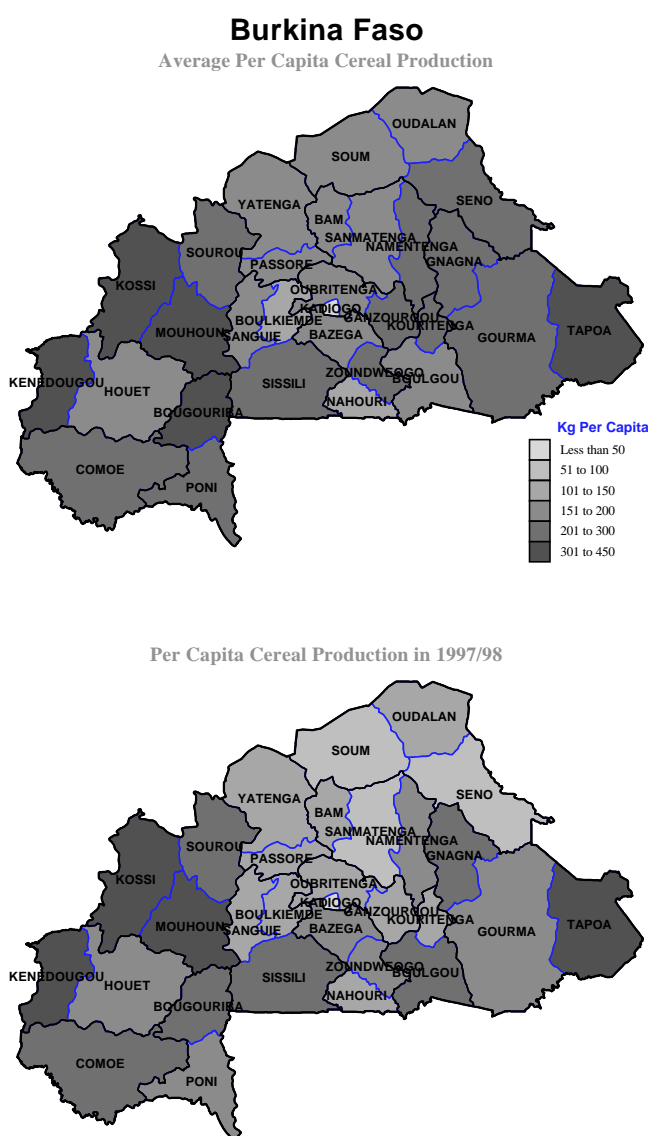
Sources: Ministry of Agriculture, FAO/CILSS

B. Subnational Cereal Production and Flows

Average per capita cereal production in Burkina is relatively high compared with other Sahelian countries. Only three prefectures produce, on average, less than 150 kg per person (figure 3), and these include Kadiago, where Ouagadougou, the capital city, is located; Boulkiemde, which includes the important population center of Koudougou; and Nahouri, where roots and tubers are prominent in the production and consumption baskets of the local population. The cereal powerhouses of the country are Bougouriba, Gnagna, Houet, Kossi, and Mouhoun in the southwest and Tapoa in the far east, which each produce, on average, a surplus⁷ of over 30,000 MT (Table 2). Kossi has the largest average surplus, of almost 90,000 MT. Houet is also a major cereal producer, but the urban population of Bobo-Dioulasso absorbs the surplus produced in rural areas of the Province.

Bobo-Dioulasso and Ouagadougou, the two largest population and consumption centers, serve as major magnets and centers of redistribution of cereals. Bobo-Dioulasso draws cereals predominantly

Figure 3. Burkina Faso—Per Capita Cereal Production



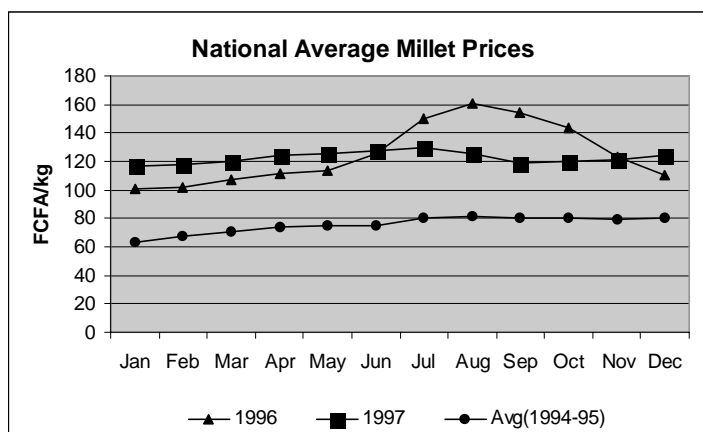
Source: Ministry of Agriculture

from Houet and the five Provinces contiguous to Houet. Ouagadougou draws cereals from all areas to the south and redistributes to all areas to the north and northeast. Tapoa serves as a major source of supply for Séno, Oudalan, northern Gourma, and the neighboring countries of Niger and Benin.

Each year, the magnitude of cereal flow depends on the local supply situations and the level of effective demand. If important supply areas have had a poor year, this reduces the surplus available for redistribution. If local production is very poor in deficit areas, this increases potential demand, but the effect on cereal flow will depend on the level of effective demand—i.e., purchasing power.

This year, all the major supply areas had average to above-average production, while the rest of the Provinces had production shortfalls⁸ of between 20 and 67 percent. While increased production in the important supply zones will mitigate the production shortfalls in the rest of the country, the magnitude of the shortfalls and the generalized nature of the poor harvest outcome in central and northern Burkina will exacerbate local shortages. The reduced supply situation is already being reflected in cereal prices. In December 1997, the national average millet price, which between July and November 1997 had remained below the exceptionally high levels of 1996, rose to 13 percent above the December 1996 price (figure 4).

Figure 4. National Average Millet Prices



Source: Market Information System (SIM)

Table 3. Provincial Cereal Production

Region	Province	Avg Net Prod (kg/cap)	1997 Net Prod (kg/cap)	Dif Net Prod 1997 vs Avg (%)	Avg Cereal Balance ⁹ (MT)	1997/98 Cereal Balance (MT)
Center	Ganzourgou	208	132	-37	4,495	-14,953
Center	Kadiogo	5	4	-24	-160,504	-174,514
Center	Ouhritenga	189	122	-35	-549	-24,252
Center-North	Bam	188	126	-33	-486	-12,006
Center-North	Namentenga	229	183	-20	8,992	-1,675
Center-North	Sanmatenga	170	66	-61	-8,726	-55,634
Center-West	Boulkiemde	148	105	-30	-17,476	-36,747
Center-West	Sanguie	190	144	-24	7	-11,638
Center-West	Sissili	236	245	4	16,619	20,130
Center-South	Bazega	199	159	-20	3,231	-12,908
Center-South	Nahouri	111	114	3	-10,558	-10,312
Center-South	Zoundweogo	242	184	-24	10,059	-1,218
Sahel	Oudalan	194	139	-28	477	-7,465
Sahel	Seno	207	68	-67	4,710	-39,212
Sahel	Soum	182	99	-46	-2,191	-23,371
Mouhoun	Kossi	392	440	12	88,967	115,142
Mouhoun	Mouhoun	305	308	1	43,045	44,606
Mouhoun	Sourou	234	252	8	15,678	23,216
East	Gnagna	259	206	-20	21,535	5,183
East	Gourma	201	195	-3	4,326	1,987
East	Tapoa	329	324	-1	30,318	30,178
Center-East	Boulgou	194	261	35	2,508	40,544
Center-East	Kouritenga	208	102	-51	4,669	-23,064
North	Passore	163	130	-20	-14,570	-14,532
North	Yatenga	186	143	-23	-11,615	-27,758
Southwest	Bougouriba	310	248	-20	31,841	15,808
Southwest	Poni	236	173	-27	13,006	-5,049
Hauts Bassins	Houet	183	195	6	-5,915	4,257
Hauts Bassins	Kenedougou	300	347	16	19,998	29,715
Comoe	Comoe	209	236	13	6,212	16,492
Burkina		200	176	-12	98,105	-149,048

Sources: Ministry of Agriculture/FAO-CILSS for the preliminary 1997/98 estimates of cereal production; Ministry of Agriculture for final production estimates for historic figures; Ministry of Agriculture/ Department of Agricultural Statistics for population figures

III. FOOD ACCESS

FEWS analysis of current vulnerability in Burkina Faso has identified approximately 256,000 farmers who are highly food insecure and approximately 396,000 farmers, pastoralists, and urban poor who are moderately food insecure (table 4). The factors that led to this outcome are described in detail below for each group.

A. Rural populations

The two main rural population groups in Burkina Faso are farmers and pastoralists.

Farmers in Burkina Faso practice mainly rain-fed crop production. There is very limited irrigated or recessional production. The diversity of crops produced depends largely on rainfall. In the south/southwest, which falls into the Sudanian agroclimatic zone (annual rainfall of 800 to 1,200 mm), farmers grow cereals, pulses, tubers, and cash crops, such as cotton and peanuts. As one moves north to the Central Plateau, which falls into the Sudano-Sahelian zone (annual rainfall of 400 to 800 mm), farmers grow mainly millet, niébé, peanuts, and, to a lesser extent, cotton. Further north, in Saharo-Sahelian zone (annual rainfall of 200 to 400 mm), farmers grow mainly millet and niébé; to a lesser extent, they grow peanuts, which are both a staple and a cash crop. Farmers

Table 4. Food-Insecure Populations in 1997/98

Region	Province	Socioeconomic Group	Highly	Moderately
Sahel	Séno	Farmers	93,000	0
		Pastoralists		10,000
	Soum	Farmers		58,000
Center-North	Oudalan	Farmers		17,000
	Sanmatenga	Farmers	131,000	
	Bam	Farmers	32,000	
Center	Namentenga	Farmers		6,000
	Oubritenga	Farmers		66,000
	Ganzourgou	Farmers		41,000
Center-East	Kadiogo	Urban Poor		12,000
	Kouritenga	Farmers		54,000
	Bazega	Farmers		36,000
Center-South	Boulkiemdé	Farmers		28,000
	Sanguié	Farmers		18,000
North	Yatenga	Farmers		15,000
	Passoré	Farmers		31,000
Total			256,000	392,000

Source: FEWS

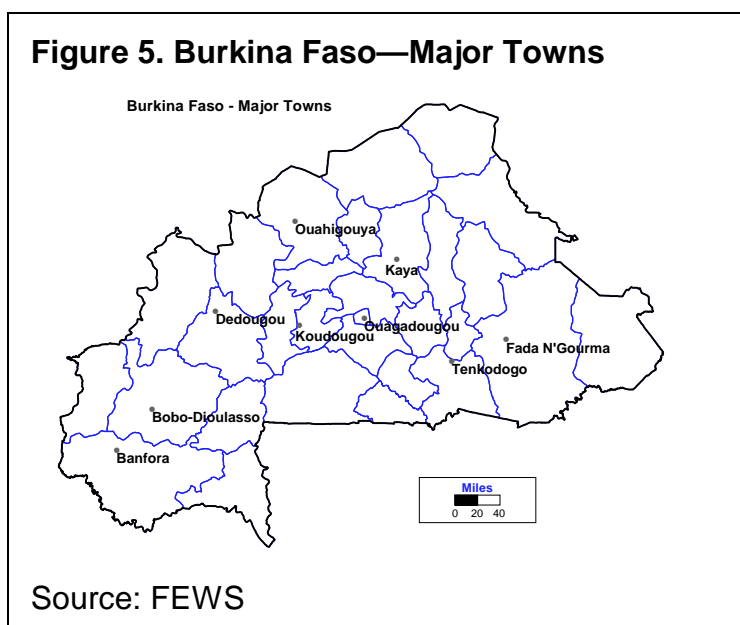
diversify their incomes through noncrop activities, including livestock raising, market gardening, handicrafts, and seasonal migration either to the closest town or to neighboring countries, especially Côte d'Ivoire. In the northern Sahel zone, farmers also practice traditional gold mining.

Farmers' current food security depends on the current harvest outcome and their ability to purchase cereals if their own production does not cover their consumption needs. This, in turn, depends on noncrop income (Appendix 2: Strategies for Food Access).

Pastoralists make up 60 to 70 percent of the population in the northern Provinces of Oudalan, Séno, Soum, and Yatenga and are present in much smaller numbers in the Provinces just to the south of these four. Their current food security depends mostly on pastoral conditions and terms of trade between animals and cereals, which affects their ability to purchase food.

B. Urban Populations

Approximately 4,770,000 people live in urban centers (figure 5) with populations greater than 50,000. These include Ouagadougou (1,200,751), Bobo-Dioulasso (621,890), Koudougou (141,219), Ouahigouya (105,813), Banfora (96,067), Kaya (70,214), Tenkodogo (63,460), Dedougou (57,523), and Fada N'Gourma (56,731). Of the total urban population, only 36,000 are employed in the civil service. The rest of the urban population are employed in the private sector.



1. Food Access by Region

The harvest outcome and its impact on farmers', pastoralists', and urban residents' ability to meet current food needs is discussed below in each of the regions where important production deficits have occurred during the 1997/98 growing season.¹⁰ Production-surplus Provinces are considered only to the extent that they play a role in supplying food to deficit Provinces.

a. Sahel Region

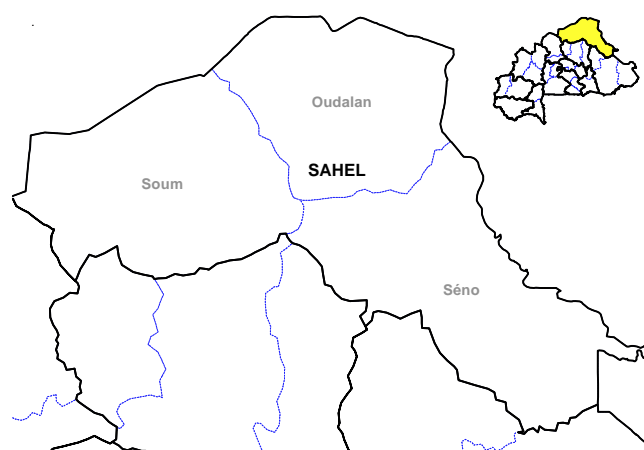
The Sahel region comprises Séno, Soum, and Oudalan Provinces (figure 6). About 75 percent of the population in this region are pastoralists. The remaining 25 percent are farmers for whom livestock raising is considered to be a secondary activity. These three Provinces have a total population of 724,568: 543,426 pastoralists and 181,142 farmers.

Percentage of needs covered through cereal production in the Sahel region fell significantly compared to average in all three Provinces (Appendix 1:

Recent Harvest Outcomes Expressed in Terms of Percentage of Needs Met through Local Cereal Production). For both Soum and Séno, this is the third consecutive year of well-below-average production. For Oudalan, it is the second. The cumulative effect of 2 or 3 years of very poor cereal harvests will most severely affect those who make their living primarily from rainfed agriculture. Because of the

magnitude of the cereal production shortfalls over the past 3 years in Séno, its relative distance from supply areas, and the poor road infrastructure, approximately 93,000 farmers in Séno—mostly in the southern more agriculturally intensive part of the Province (Sebba area)¹¹—are considered highly food insecure, and approximately 10,000 pastoralists are considered moderately food insecure. In Soum and Oudalan, local production shortfalls should be compensated for by increased cereal availability in Mali, where

Figure 6.



Source: FEWS

harvests were good. Approximately 75,000 farmers in Soum and Oudalan Provinces are moderately food insecure.

b. Center-North Region

The Center-North comprises Bam, Sanmatenga, and Namentenga Provinces (Figure 7), which together have a population of 871,874. Farmers account for approximately 90 percent (784,687) of the population,

with pastoralists making up the rest (87,187). This region lies in the Saharo-Sahelian zone, which receives, on average, 200 to 400 mm of rainfall per year. The major crops grown in the Center-North are primarily millet and niébé; to a lesser extent, peanuts, which are produced for consumption and as a cash crop, are also grown.

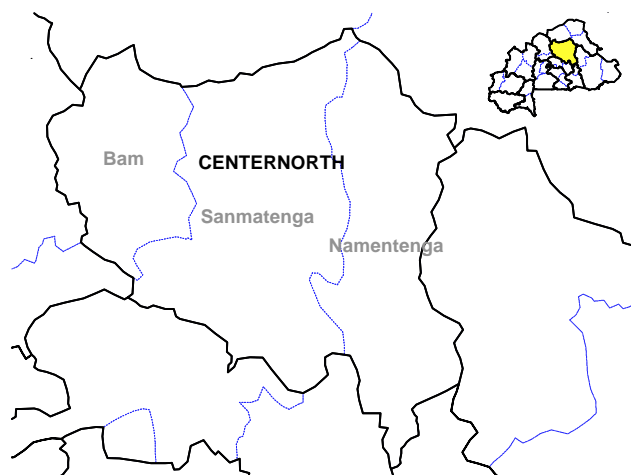
In Bam, Sanmatenga, and Namentenga, the percentage of needs met through cereal production declined 32, 56, and 12 percent, respectively, compared with the average (Appendix 1: Recent Harvest Outcomes Expressed in Terms of Percentage of Needs Met through Local Cereal Production). Nevertheless, Namentenga is still meeting 96 percent of its needs. In contrast, Sanmatenga, which on average meets 79 percent of its cereal needs through local production, will meet only 35 percent this year. Bam's production fell from meeting 97 percent of needs, on average, to meeting 66 percent this year. Both Provinces are surrounded by areas that also experienced poor harvests: Ganzourgou, Oubritenga, Séno, Soum, and Yatenga. Through December, pastoral conditions were satisfactory, suggesting that pastoralists in these Provinces will be less affected.

Approximately 131,000 farmers in Sanmatenga and 32,000 farmers in Bam are considered highly food insecure after experiencing 2 poor years in a row. Approximately 6,000 farmers in Namentenga are considered moderately food insecure.

c. Center Region

The Center region of Burkina Faso comprises Oubritenga, Ganzourgou, and Kadiogo Provinces (Figure 8). This region has an overall population of

Figure 7.



Source: FEWS

1,554,086. Kadiogo has the largest population - 936,423 – because it contains Ouagadougou, the national capital. The region belongs to the Sudano-Sahelian zone, which receives, on average, 400 to 800 mm of rainfall per year.

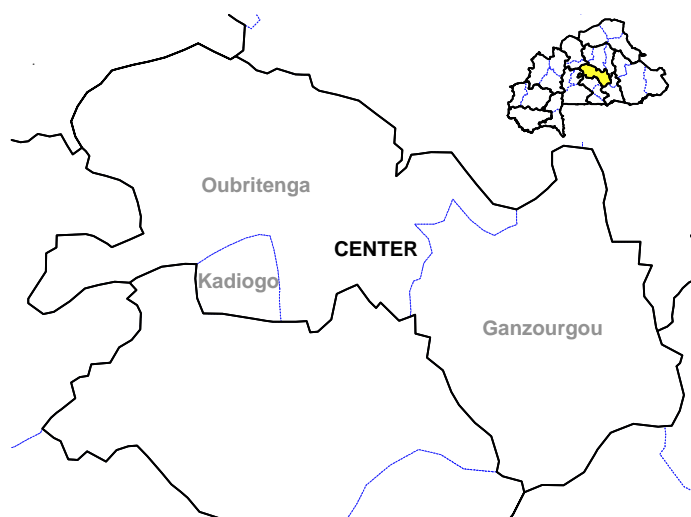
In Kadiogo, the majority of the population are civil servants, private-sector employees, or wage

earners. In Ganzourgou and Oubritenga, most people are farmers who grow millet and niébé and, to a lesser extent, sorghum, maize, and cotton. There are very few pastoralists in the region. While percentage of needs met through cereal production declined 36 and 38 percent compared with the average in Oubritenga and Ganzourgou (Appendix 1: Recent Harvest Outcomes Expressed in Terms of Percentage of Needs Met through Local Cereal Production), respectively, the production shortfalls will be somewhat attenuated by the proximity of these two provinces to Ouagadougou, which is a major distribution center for cereals. The production shortfalls will nonetheless increase hardships for the poorest households. Consequently, approximately 12,000 individuals in Kadiogo (1.2 percent of the population), 66,000 in Oubritenga (18 percent of the population), and 41,000 in Ganzourgou (16 percent of the population) are considered moderately food insecure.

d. Center-East Region

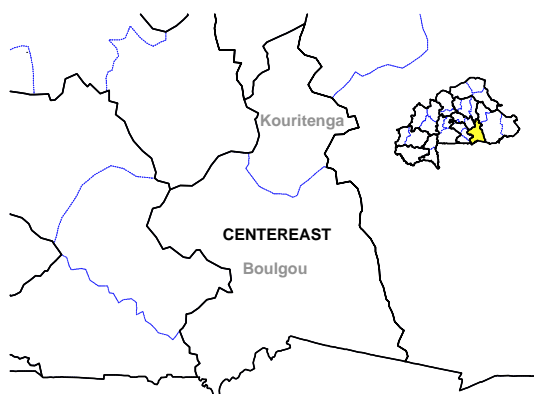
The Center-East region of Burkina is comprised of Boulgou and Kouritenga Provinces (figure 9). These two Provinces have an overall population of 831,131 people. Around 98

Figure 8.



Source: FEWS

Figure 9.



Source: FEWS

percent of the population rely primarily on production of rainfed crops such as millet, niébé, peanuts, and rice.

Boulgou is primarily located in the Sudano-Sahelian zone whereas Kouritenga is mainly within the limits of the Sahelian agro-climatic zone. This year Boulgou met 84 percent more of its cereal needs than it does on average and the farming populations of Boulgou should be food secure (appendix 1). In contrast, the percentage of needs met through crop production declined 37 percent compared to average in Kouritenga. Considering the relatively limited income alternatives available in this province where most people are subsistence farmers, approximately 54,000 farmers are considered moderately food insecure this year.

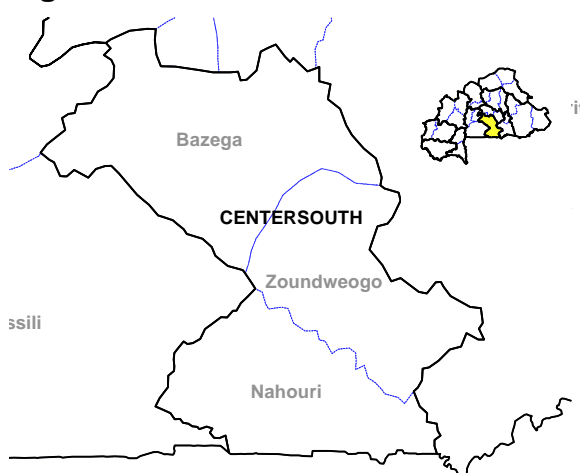
e. Center-South Region

The Center-South region is comprised of Bazega, Nahouri, and Zoundweogo Provinces (figure 10). The combined population of these provinces is 748,088. Almost all of the population lives primarily from crop production. Zoundweogo and Nahouri are located in the Sudano-Sahelian zone, while Bazega is located in the Sahelian zone.

The percentage of needs met through production in these provinces was down 24, 12, and 22 percent, respectively, compared to average (appendix 1). Nevertheless, the negative impact on food security will be limited for a number of reasons. In Nahouri, farmers produce

tubers in addition to cereals and these contribute substantially to food consumption. In addition, Nahouri borders Ghana and the strong FCFA increases the purchasing power of local populations for products coming from Ghana. In Bazega, most of the population earns income from horticulture and market gardening during the off-season. The nearby market of Ouagadougou provides a steady outlet for their off-season production. In Zoundweogo, while production was down compared to average, farmers still produced 97 percent of their cereal needs. Thus populations in Bazega, Nahouri, and Zoundweogo are considered food secure.

Figure 10.



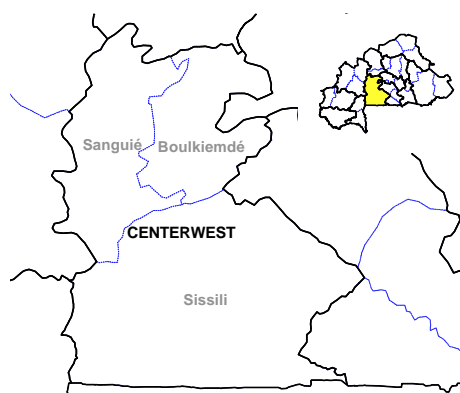
Source: FEWS

f. Center-West Region

The Center-West region of Burkina Faso is comprised of the Boulkiemdé, Sanguié, and Sissili Provinces (figure 11) with a population of 1,050,808 persons. Around 41 percent of the population live in Boulkiemdé which includes Koudougou, the district capital and its nearly 52,000 residents. Nearly the entire population earns its living from farming, growing millet, niébé, and sorghum as staple crops, along with some cotton and rice as cash crops. In Sissili, farmers also grow tubers. Most of Boulkiemdé and Sanguié are located in the Sudano-Sahelian zone whereas Sissili is part of the Sudanian zone.

Sissili produced 129 percent of its needs this year, which is 7 percent higher than average (appendix 1). Boulkiemdé and Sanguié produced 25 percent less than average. Neither will meet food cereal needs through local production this year, but market availability of cereals should be adequate because the dynamic market in the capital of Koudougou draws cereals and other food commodities from surplus areas such as Sissili and the southwestern provinces. Most households will be able to rely on income from alternative sources to purchase food. Poor farming families will experience hardship, however, if cereal prices increase significantly above normal seasonal increases. Approximately 28,000 farmers in Boulkiemdé and 18,000 in Sanguié are considered moderately food insecure.

Figure 11.



Source: FEWS

g. North Region

The North region of Burkina Faso is comprised of the Passoré and Yatenga Provinces (figure 12). These two Provinces have an overall population of 831,633 including 39,000 in the urban center of Ouahigouya. About 25 percent of the population is engaged mainly in livestock activities while the rest are primarily farmers who grow millet and niébé during the regular season and gardening crops (potato, onion) during the off-season. Most of the North region straddles the Sudano-Sahelian and the Sahelian zone.

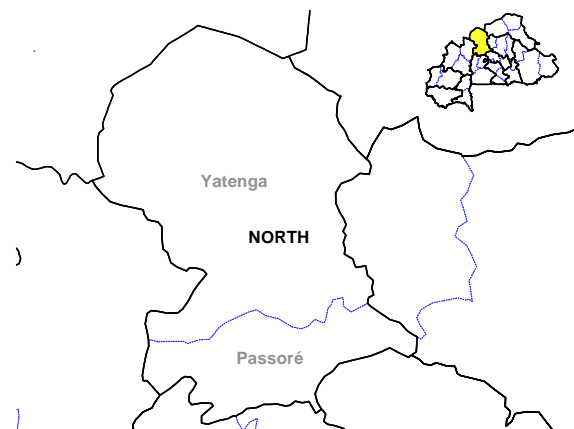
Percentage of needs met through cereal production in 1997 fell 22 in Yatenga and 15 percent in Passoré compared to average **Passoré** (appendix 1).

The previous year, Yatenga had an average harvest—producing enough to meet its needs—whereas Passoré grew 20 percent more than average. Good access to the urban center markets of Ouahigouya and to cereals from surplus areas in Mali are mitigating factors. Nevertheless, approximately 46,000 individuals (15,000 in Yatenga and 31,000 in Passoré) are considered to be moderately food insecure.

h. South-West Region

The South-West region of Burkina Faso is comprised of Bougouriba and Poni Provinces (figure 13). These two Provinces have a combined population of 561,917. Nearly the entire population makes their living primarily from crop production. The South-West region belongs to the Sudanian agro-climatic zone. In this region, floods pose more frequent threats to production than does drought. In Poni, flooding in the two previous years reduced the percentage of needs met through production by 30 and 25 percent compared to average and in Bougouriba, by 8 and 24 percent (appendix 1). Nevertheless, this year Bougouriba and Poni were able to cover 131 and 91 percent of their needs, respectively. Poni's cereal production shortfall will be met by cereals from the surplus provinces in the southwest. Households have income from fishing, hunting, and traditional gold mining to finance cereal purchases.

Figure 12.



Source: FEWS

Figure 13.



Source: FEWS

IV. CONCLUSION

Approximately 648,000 persons are moderately to highly food insecure as a result of this year's and in some cases 2 to 3 years of poor harvests. The highly food insecure populations—mostly farming families—are found in Bam, Séno, and Sanmatenga Provinces and total approximately 256,000 persons. They are in need of assistance to meet food needs before the next harvest.

Approximately 392,000 other persons are moderately food insecure and their status should be closely monitored.

V. APPENDIXES

A. Appendix 1: Recent Harvest Outcomes Expressed in Terms of Percentage of Needs Met through Local Cereal Production¹²

Region	Province	POP 1998	Needs Met ¹³ (%)				Needs Met vs Avg (% dif)		
			Avg (%)	1995/96	1996/97	1997/98	1995/96	1996/97	1997/98
Center	Ganzourgou	258,436	112	108	99	70	-4	-12	-38
Center	Kadiogo	936,423	3	3	2	2	-1	-16	-25
Center	Ouhimbira	359,227	101	106	89	64	5	-12	-36
Center-North	Bam	187,367	97	81	85	66	-17	-13	-32
Center-North	Namentenga	234,190	110	106	127	96	-4	16	-12
Center-North	Sanmatenga	450,317	79	98	71	35	24	-10	-56
Center-West	Boulkiemdé	429,816	73	76	73	55	3	0	-25
Center-West	Sanguié	255,140	101	88	97	76	-13	-4	-25
Center-West	Sissili	365,852	120	112	132	129	-6	10	7
Center-South	Bazega	412,687	109	85	104	84	-22	-5	-24
Center-South	Nahouri	136,120	47	62	66	60	30	41	27
Center-South	Zoundweogo	199,281	124	133	130	97	7	5	-22
Sahel	Oudalan	145,300	95	99	67	73	4	-30	-24
Sahel	Séno	321,954	129	81	61	36	-37	-53	-72
Sahel	Soum	257,314	105	56	73	52	-47	-31	-50
Mouhoun	Kossi	460,658	207	174	211	232	-16	2	12
Mouhoun	Mouhoun	379,545	146	139	168	162	-5	15	11
Mouhoun	Sourou	376,382	102	106	158	132	4	55	30
East	Gnagna	327,137	108	171	134	108	59	24	1
East	Gourma	439,236	110	90	106	102	-18	-4	-7
East	Tapoa	224,584	127	213	189	171	67	48	34
Center-East	Boulgou	568,335	75	100	124	138	34	66	84
Center-East	Kouritenga	262,796	85	149	85	54	75	0	-37
North	Passoré	243,875	80	65	96	69	-20	20	-15
North	Yatenga	587,758	97	58	97	75	-40	0	-22
Southwest	Bougouriba	270,425	165	127	152	131	-23	-8	-21
Southwest	Poni	291,522	130	138	97	91	6	-25	-30
Hauts Bassins	Houet	913,678	97	88	91	102	-10	-6	5
Hauts Bassins	Kenedougou	189,718	156	155	150	182	-1	-4	17
Comoe	Comoe	354,823	119	85	102	124	-29	-14	5

Sources: Ministry of Agriculture/FAO-CILSS for the preliminary 1997/98 estimates of cereal production; Ministry of Agriculture for final production estimates for historic figures; Ministry of Agriculture/Department of Agricultural Statistics for population figures

B. Appendix 2: Strategies for Food Access

Region	Province	POP 1997/98	Cereal Needs 1997/98	Net Cereal Prod 1997/98	Cereal Balance 1997/98	% of Needs Not Covered Locally	Strategies for Food Access	Probable Degree of Food Insecurity	Avg Needs Met	% Dif vs Avg		
										1995/96	1996/97	1997/98
Center	Ganzourgou	258,436	49,103	34,150	-14,953	30	Livestock; access to good road, close to Ouaga and Bouglou (a surplus area)	Moderate	112	-4	-12	-38
Center	Kadiogo	936,423	177,920	3,406	-17,4514	98	Capital city, salaries, wages, trade, market gardening, craftwork, etc.	Low	3	-1	-16	-25
Center	Oubritenga	359,227	68,253	44,001	-24,252	36	Access to road, close to Ouaga, wages, market gardening	Moderate	101	5	-12	-36
Center-North	Bam	187,367	35,600	23,594	-12,006	34	Fishing, market gardening	Moderate	97	-17	-13	-32
Center-North	Namentenga	234,190	44,496	42,821	-16758	38	Dam, market gardening, fishing, livestock	Moderate	110	-4	16	-12
Center-North	Sanmatenga	450,317	85,560	29,926	-55,634	65	Livestock, market gardening, good road, access to Ouaga	Moderate	79	24	-10	-56
Center-West	Boulkiemde	429,816	81,665	44,918	-36,747	45	Market gardening, good road, access to Ouaga	Moderate	73	3	0	-25
Center-West	Sanguie	255,140	48,477	36,839	-11638	24	Market gardening, good road, access to Ouaga	Moderate	101	-13	-4	-25
Center-West	Sissili	365,852	69,512	89,642	20,130	—	—	—	120	-6	10	7
Center-South	Bazega	412,687	78,411	65,502	-12,908	16	Market gardening, horticulture, good road, close to Ouaga, livestock	Low	109	-22	-5	-24
Center-South	Nahouri	136,120	25,863	15,551	-10,312	40	Tubers, market gardening, next to Sissili and Boulgou which could supply to meet needs	Low	47	30	41	27
Center-South	Zoundweogo	199,281	37,863	36,645	-1,218	3	Livestock, market gardening, good road, next to Boulgou (a surplus zone)	Moderate	124	7	5	-22
Center-South	Zoundweogo	199,281	37,863	36,645	-1,218	3	Livestock, market gardening, good road, next to Boulgou (a surplus zone)	Moderate	124	7	5	-22

Food Access

Region	Province	POP 1997/98	Cereal Needs 1997/98	Net Cereal Prod 1997/98	Cereal Balance 1997/98	% of Needs Not Covered Locally	Strategies for Food Access	Probable Degree of Food Insecurity	Avg Needs Met	% Dif vs Avg		
										1995/96	1996/97	1997/98
Sahel	Oudalan	145,300	27,607	20,142	-7,465	27	Livestock, some market gardening, next to Mali's border where needs can be met, traditional goal mining	Moderate	95	4	-30	-24
Sahel	Seno	321,954	61,171	21,960	-39,212	64	Livestock, some market gardening, traditional goal mining, but poor roads and 3yr consecutive deficit	High	129	-37	-53	-72
Sahel	Soum	257,314	48,890	25,519	23,371	48	Livestock, market gardening, traditional goal mining, borders Mali	Moderate	105	-47	-31	-50
Mouhoun	Kossi	460,658	87,525	202,667	115,142	—	—	None	207	-16	2	12
Mouhoun	Mouhoun	379,545	72,114	116,719	44,606	—	—	None	146	-5	15	11
Mouhoun	Sourou	376,382	71,513	94,729	23,216	—	—	None	102	4	55	30
East	Gnagna	327,137	62,156	67,340	5,183	—	—	None	108	59	24	1
East	Gourma	43,9236	83,455	85,442	1,987	—	—	None	110	-18	-4	-7
East	Tapoa	224,584	42,671	72,849	30,178	—	—	None	127	67	48	34
Center-East	Boulgou	568,335	107,984	148,528	40,544	—	—	None	75	34	66	84
Center-East	Kouritenga	262,796	49,931	26,868	-23,064	46	Livestock, some market gardening, good road access	Moderate	85	75	0	-37
North	Passore	243,875	46,336	31,804	-14,532	31	Some livestock, big dam, market gardening, good road access	Moderate	80	-20	20	-15
North	Yatenga	587,758	111,674	83,916	-27,758	25	Livestock, market gardening, wages, good road access, near Mali's border where grain is available	Moderate	97	-40	0	-22
Southwest	Poni	291,522	55,389	50,340	-5,049	9	Small deficit, livestock, market gardening, hunting, fishing, near several surplus provinces, goal mining	Low	130	6	-25	-30
Hauts Bassins	Houet	913,678	173,599	177,855	4,257	—	—	None	97	-10	-6	5
Hauts Bassins	Kenedougou	189,718	36,046	65,761	29,715	—	—	None	156	-1	-4	17
Comoe	Comoe	35,4823	67,416	83,908	16,492	—	—	None	119	-29	-14	5

Average – 1990/91-1994/95

Sources:FAO/CILSS, 1997; Ministry of Agriculture, 1997; Les Atlas Jeune Afrique, Burkina Faso, Les Editions Jeune Afrique, 1993; Ministry of Agric., Direction des Statistiques Agro-Pastorales, Dec. 1992; Ministry of Agric., Ressources Animales, Cellules Statistiques Animales, 1992

VI. NOTES

¹¹ For most agricultural populations, the current consumption period refers to the period between the current harvest and the next harvest, which is usually, but not necessarily, a full year.

² This takes into account the degree of integration of specific areas into the national market. Geographic isolation and status of transport infrastructure are key factors considered.

³ The rainy season typically runs from May to September; harvest usually occurs from August to December. For the purposes of this analysis, the 1997/98 agricultural season is referred to as this season, or this year. The 1996/97 agricultural season is referred to as last season or last year.

⁴ Averages for all production comparisons refer to the average for 1992/93 though 1996/97, unless otherwise noted.

⁵ All estimates of stocks are as of October 30, 1997, when the preliminary cereal balance was established.

⁶ Includes millet, sorghum, maize, and fonio.

⁷ The regional cereal balance is calculated using a national level annual cereal consumption standard of 190 kg per person.

⁸ A production shortfall refers to below-average production.

⁹ 'Cereal balance' in this table refers to the difference between local consumption needs and local production. It does not take into account stocks, imports, or exports.

¹⁰ Throughout this section, production is expressed in terms of percentage of needs met. Since harvest outcomes over the last 3 years are considered, the average used was 1990/91-1994/95.

¹¹ Séno has been divided into two provinces—Séno and Yaga (Sebba is the new provincial capital).

¹² The 1990/91-1994/95 average is used to enable comparison of each of the last three production years, 1995/96, 1996/97, 1997/98, to the same 5-yr average.

¹³ Needs met calculated using consumption standard of 190 kg per capita. Net production is calculated using the following conversion factors: .85 for millet, sorghum, maize; .62 for rice.